CLAIMS

1.   A method in a computer system for determining performance of a turbine, the method comprising:

    receiving from a user an identification of a turbine;

    retrieving configuration information for the identified turbine;

    determining current performance characteristics of the turbine based on the retrieved configuration information;

    sending to the user a display page for displaying the determined current performance characteristics;

    receiving from the user an indication of a modification to the configuration of the identified turbine;

    determining future performance characteristics of the identified turbine based on the indicated modification to its configuration; and

    sending to the user a display page for displaying the determined future performance characteristics.

2.   The method of claim 1 wherein the determining of the current performance characteristics includes simulating the current performance characteristics based on various readings collected from the identified turbine.

3.   The method of claim 2 wherein the simulating of the current performance characteristics includes estimating fuel flow by repeatedly simulating the current performance characteristics with a varying fuel flow until a desired combustor efficiency is achieved.

4.   The method of claim 1 wherein the determining of the current performance characteristics includes adjusting initial performance characteristics based on length of time the identified turbine has been in operation.

1   5.   The method of claim 1 wherein the determining of the current

2 performance characteristics includes measuring the performance characteristics of the

3 turbine.

1   6.   The method of claim 1 wherein the display page includes an indication

2 of average performance characteristics for similar turbines.

1   7.   The method of claim 1 wherein the display page include an indication of

2 highest performance characteristics for similar turbines.

1   8.   The method of claim 1 wherein the display page includes a graph

2 illustrating performance characteristics.

1   9.   The method of claim 8 wherein the graph includes a background with

2 colors that transition from a shade of red to a shade of yellow to a shade of green.

1   10.   The method of claim 1 including receiving financial information relating

2 to operation of the identified turbine and estimating revenue generated from the identified

3 turbine with the indicated modification.

1   11.   A method in a computer system for determining performance of a

2 turbine, the turbine having a configuration, the method comprising:

3   simulating a current performance characteristic based on various readings

4 collected from an identified turbine;

5   receiving from a user an indication of a modification to the configuration of the

6 identified turbine;

7   determining a future performance characteristic of the identified turbine based

8 on the indicated modifications to its configuration; and

9   sending to the user a display page for displaying the determined future

10 performance characteristic.

1   12.   The method of claim 11 wherein the simulating of the current

2   performance characteristic includes estimating fuel flow by repeatedly simulating the current

3   performance characteristic with a varying fuel flow until a desired combustor efficiency is

4   achieved.

1   13.   The method of claim 11 wherein the display page includes an indication

2   of an average for the performance characteristic for similar turbines.

1   14.   The method of claim 11 wherein the display page includes an indication

2   of a highest performance characteristic for similar turbines.

1   15.   The method of claim 11 wherein the display page includes a graph

2   illustrating performance characteristics.

1   16   The method of claim 15 wherein the graph includes a background with

2   colors that transition from a shade of red to a shade of yellow to a shade of green.

1   17.   The method of claim 11 wherein the display page is a web page.

1   18.   The method of claim 11 wherein the display page is sent via the

2   Internet.

1   19.   The method of claim 11 including receiving financial information

2   relating to operation of the identified turbine and estimating revenue generated from the

3   identified turbine with the indicated modification.

1   20.   A method in a computer system for displaying a performance

2   characteristic of a turbine, the method comprising:

3   sending an identification of a turbine ; and

4   receiving a display page indicating a performance characteristic of the

5   identified turbine relative to the performance characteristic for similar turbines.

1   21.   The method of claim 20 including

2   sending an indication of a modification to the identified turbine; and

3   receiving a display page indicating the performance characteristic of the

4   identified turbine with the indicated modification.

1   22.   The method of claim 20 wherein the display page includes financial

2   information relating to possible modifications to the identified turbine.

1   23.   The method of claim 20 wherein the performance characteristic of the

2   identified turbine is displayed as a graph.

1   24.   The method of claim 23 wherein the graph indicates the performance

2   characteristic for similar turbines.

1   25.   The method of claim 24 wherein the graph includes an indication of an

2   average performance characteristic for similar turbines.

1   26.   The method of claim 24 wherein the graph includes an indication of a

2   highest performance characteristic for similar turbines.

1   27.   The method of claim 23 wherein the graph includes a background with

2   colors that transition from a shade of red to a shade of yellow to a shade of green.

1   28.   A computer-readable medium containing instructions for controlling a

2   computer system to determine a performance characteristic of a turbine, the turbine having a

3   configuration, by a method comprising:

4   simulating a current performance characteristic based on various readings

5   collected from an identified turbine;

6   receiving an indication of a modification to the configuration of the identified

7   turbine; and

8   determining a future performance characteristic of the identified turbine based

9 on the indicated modifications to its configuration.

1   29. The computer-readable medium of claim 28 wherein the simulating of

2 the current performance characteristic includes estimating fuel flow by repeatedly simulating

3 the current performance characteristic by varying fuel flow until a desired combustor

4 efficiency is achieved.

1   30. The computer-readable medium of claim 28 including receiving

2 financial information relating to operation of the identified turbine and estimating revenue

3 generated from the identified turbine with the indicated modification.

1   31. The computer-readable medium of claim 28 including sending a display

2 page for displaying the determined future performance characteristic.

1   32. The computer-readable medium of claim 31 wherein the display page

2 includes an indication of an average for the performance characteristic for similar turbines.

1   33. The computer-readable medium of claim 31 wherein the display page

2 includes an indication of a highest performance characteristic for similar turbines.

1   34. The computer-readable medium of claim 31 wherein the display pages

2 includes a graph illustrating the performance characteristics.

1   35 The computer-readable medium of claim 34 wherein the graph includes

2 a background with colors that transition from a shade of red to a shade of yellow to a shade

3 of green.

1   36. The computer-readable medium of claim 31 wherein the display page is

2 a web page.

1   37.   The computer-readable medium of claim 31 wherein the display page is

2 sent via the Internet.

1   38.   A computer system for determining a performance characteristic of a

2 turbine, the turbine having a configuration, comprising:

3   means for receiving an indication of a modification to the configuration of an

4 identified turbine; and

5   means for determining a future performance characteristic of the identified

6 turbine based on the indicated modifications to its configuration.

1   39.   The computer system of claim 38 including:

2   means for simulating a current performance characteristic based on various

3 readings collected from the identified turbine.

1   40.   The computer system of claim 39 wherein the means for simulating the

2 current performance characteristic includes means for estimating fuel flow by repeatedly

3 simulating the current performance characteristic by varying fuel flow until a desired

4 combustor efficiency is achieved.

1   41.   The computer system of claim 38 including means for receiving

2 financial information relating to operation of the identified turbine and means for estimating

3 revenue generated from the identified turbine with the indicated modification.